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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,224	06/26/2001	Guojun Zhou	P 280337 P11803	8571

27496 7590 07/26/2005

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EXAMINER
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AZAD, ABUL K

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/891,224	Applicant(s) ZHOU, GUOJUN	
	Examiner ABUL K. AZAD	Art Unit 2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5,8-13,16-22 and 25-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,8-13,16-22 and 25-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of 1-5, 8-13, 16-22 and 25-27 in the reply filed on August 24, 2004 is acknowledged.
2. Claims 1-5, 8-13, 16-22 and 25-27 are pending in this action. Claims 1, 4, 5, 8-13, 17-22 and 25-27 have been amended. Claims 6, 7, 14, 15, 23 and 24 have been canceled.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3,4, 8-10, 12, 16-19, 21 and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Abella et al. (US 6,044,347).

As per claim 1, Abella teaches, "a statistical dialog system," comprising:

"a speech understanding mechanism for determining the literal meaning of input speech data" (col. 7, lines 53-63);

"a dialog semantics learning mechanism for establishing semantic models based on annotated dialog training data, the annotated dialog training data associating literal meaning of input speech data with one or more semantic meanings of the input speech data" (col. 8, lines 22-50); and

"a statistical dialog manager for interpreting one semantic meaning of the input speech data based on both the literal meaning of the input speech data and corresponding semantic models that are associated with the literal meaning of the input speech data" (col. 7, lines 47-67).

As per claim 3, Abella teaches, "further comprising a responding mechanism for generating at least one response to the input speech data based on the semantic meaning of the input speech data" (col. 8, lines 1-21).

As per claim 4, Abella teaches, "wherein the responding mechanism includes a voice response mechanism for generating a voice response to the input speech data based on the semantic meaning of the input speech data; and an action response mechanism for activating an action corresponding to the semantic meaning of the input speech data" (col. 8, lines 1-33).

As per claim 8, Abella, teaches, "a system", comprising:

"a semantic model retrieval mechanism for retrieving, from a semantic model storage, semantic models associated with a literal meaning of input speech data" (col. 7, lines 47-67); and

"a dialog semantic understanding mechanism for interpreting, during a dialog session, the semantic meaning of the input speech data according to the semantic models and an environmental status" (col. 13, line 50 to col. 14, line 10 and col. 15, line 65 to col. 16, line 24).

As per claim 9, Abella teaches, "an environmental status access mechanism for accessing the environmental status that affects the interpretation of the semantic

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meaning of the input speech data, the environmental status being used, together with the semantic models, by the dialog semantic understanding mechanism to interpret the semantic meaning of the input speech data" (col. 13, line 50 to col. 14, line 10 and col. 15, line 65 to col. 16, line 24); and

"a dialog data annotation mechanism for annotating the relationship between said literal meaning of the input speech data and the semantic meaning of the input speech data based on the dialog session to generate feedback dialog data" (col. 13, line 50 to col. 14, line 10 and col. 15, line 65 to col. 16, line 24).

As per claims 10, 12, 16-19, 21 and 25-27, they are interpreted and thus rejected for the same reasons set forth in the rejection of claims 1, 3, 4, 8 and 9.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abella et al. (US 6,044,347) as applied to claims 1, 10, and 19 above, and further in view of Huang et al. (US 6,865,528).

As per claims 2, 11 and 20, Abella does not explicitly teach speech recognition based on at least one acoustic model and a language understanding mechanism.

However, Huang teaches speech recognition based on at least one acoustic model and

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a language understanding mechanism (col. 5, lines 25-54). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use acoustic model and language model to speech recognizer because Huang teaches his invention attempts to ascertain the accurate meaning or intent of the utterance in order to perform a particular action (col. 1, lines 50-67).

7. Claims 5, 13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abella et al. (US 6,044,347) as applied to claims 4, 12 and 21 above, and further in view of Papineni et al. (US 6,246,981).

As per claim 5, Abella teaches, "wherein the voice response mechanism comprises:

"a language response generation mechanism for generating a language response to the input speech according to the semantic meaning of the input speech data" (col. 8, lines 1-21); and

Abella teaches synthesizing the voice of the language response to generate the voice response (Fig. 1, elements 20 and 22), but does not explicitly teach a text to speech engine. However, Papineni teaches a text to speech engine (Fig. 1, element 70). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a text to speech engine because Papineni invention provide a more versatile interface for interacting with the users (col. 1, lines 6-10).

As per claims 13 and 22, they are interpreted and thus rejected for the same reasons set forth in the rejection of claims 5.

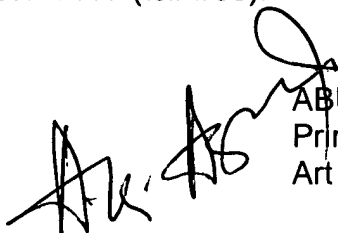
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***Contact Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABUL K. AZAD whose telephone number is (571) 272-7599. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHEMOND DORVIL can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
ABUL K. AZAD  
Primary Examiner  
Art Unit 2654

July 17, 2005